

ABSTRACT OF THE DISCLOSURE

There is provided a copper-plating liquid free from an alkali metal and a cyanide which, when used in plating of a substrate having an outer seed layer and fine recesses of a high aspect ratio, can
5 reinforce the thin portion of the seed layer and can embed copper completely into the depth of the fine recesses.

The plating liquid contains divalent copper ions and a complexing agent, and an optional pH adjusting agent.